

LETTER

FROM

THE COMMISSIONER OF AGRICULTURE

TO THE CHAIRMAN OF THE COMMITTEE ON AGRICULTURE,

COMMUNICATING

Information on the subject of pleuro-pneumonia among cattle.

FEBRUARY 15, 1879.—Ordered to be printed.

DEPARTMENT OF AGRICULTURE,
Washington, D. C., February 14, 1879.

SIR: I have the honor to acknowledge the receipt of your letter of recent date, asking for such information as may be in my possession relating to the subject of pleuro-pneumonia among cattle. The subject is one that is attracting great attention in this country at present; hence information is rapidly accumulating in this department, the more important portion of which I herewith transmit for the information of your committee. I shall first give a brief statement of the action of the department in the matter, and then submit such letters, telegrams, and other information of an important character bearing upon the subject as have recently come into my possession.

In August, 1877, within one month after my accession to the position of Commissioner of Agriculture, I instituted a preliminary examination of diseases of domesticated animals. For years I have been cognizant of the loss of immense numbers of swine and other farm animals by disease, supposed to be of an infectious and contagious character; and, with the very limited means at my disposal, I opened a correspondence with leading farmers and stock-growers in almost every county in the United States. The result of this correspondence was the accumulation of a vast amount of important information on the subject under consideration, which, by request of the Senate, was communicated to that body on the 27th day of February, 1878, and was afterwards published as Senate Ex. Doc. No. 35.

In order that a thorough examination might be made into some of the more destructive diseases affecting farm animals, and such remedial and sanitary measures instituted as would prevent the spread of such maladies as were well known to be both infectious and contagious, an appropriation of \$30,000 was asked, and the sum of \$10,000 was granted. In my letter of transmissal to the Senate in February, 1878, the following language is used:

Our wide extent of country and its great diversity of temperature and variation of climate, the severity of frosts in some sections, and the intensity of heat in other localities, render farm-stock liable to the attacks and ravages of almost every disease known in the history of domestic animals. So general and fatal have many of these

maladies grown that stock breeding and rearing has, to some extent, become a precarious calling instead of the profitable business of former years. This would seem especially true as it relates to swine. Year by year new diseases, heretofore unknown in our country, make their appearance among this class of farm animals, while older ones become permanently localized and much more fatal in their results. Farmers, as a rule, are neglectful of their stock, and pay but little attention to sporadic cases of sickness among their flocks and herds. It is only when diseases become general, and consequently of an epidemic and contagious character, that active measures are taken for the relief of the afflicted animals. It is then generally too late, as remedies have ceased to have their usual beneficial effects, and the disease is only stayed when it has no more victims to prey upon.

This interest is too great to be longer neglected by the general government. Not only the health of its citizens, but one of the greatest sources of our wealth, demands that it should furnish the means for a most searching and thorough investigation into the causes of all diseases affecting live stock.

At the time this communication was made it was not known that the destructive disease known as contagious or malignant pleuro-pneumonia among cattle was prevalent to any considerable extent in any section of the country. There may have been, and no doubt were, isolated cases of the disease, but they were not sufficient in number to attract attention or cause alarm. During the past summer and fall my attention was called to the prevalence of the disease in several localities widely separated from each other. Among other letters addressed to me on the subject, I cite the following:

J. Elwood Hancock, of Burlington County, New Jersey, writes:

The prevailing disease among cattle in this county is pleuro-pneumonia. The disease is very fatal, and the losses among this class of animals from this malady have been very heavy.

Mr. J. E. Hancock, of Columbus, Burlington County, New Jersey, states that the disease has been prevalent in that county for some years. He says:

I have had some experience with pleuro-pneumonia among cattle, having lost one-third of my herd from its ravages in 1861, when I succeeded in eradicating the disease after a duration of about six months. I had a second visitation of the malady in my herd in the early part of 1866, when I lost 6 head from a herd of 23. Of the animals affected I am satisfied that not more than one-third will recover.

N. W. Pierson, Alexandria, Va., writes as follows, under date of October 12, 1878:

The principal disease among cattle in this locality is pleuro-pneumonia. The disease started from Georgetown, D. C., two years ago, and has gradually spread down the Potomac for a distance of about 25 miles, extending back from the river not more than 2 miles.

R. A. Murrill, Campbell County, Virginia, writes, about the same date:

An unknown disease has prevailed this fall among cattle in the immediate vicinity of Lynchburg but has not spread elsewhere. [This disease was pronounced pleuro-pneumonia by competent authority.]

R. L. Ragland, Halifax County, Virginia, writes, that the cattle in that county are affected with a contagious distemper which is supposed to be pleuro-pneumonia.

C. Gingrich, Reistertown, Baltimore County, Maryland, says:

Lung fever (pleuro-pneumonia) has prevailed among cattle in the vicinity of Baltimore for the past twelve or fifteen years, and the losses from the same have been quite heavy.

A report from William S. Vansant, veterinary surgeon, contained in the report of the New Jersey State board of agriculture for 1876, shows that nineteen different herds of cattle suffered from this disease in Burlington County of that State during the year above named. It would seem that while the disease has been almost constantly present in New

Jersey for many years past, no organized effort on the part of the State has been made for its suppression and extirpation.

With no means at my command for the suppression of the malady, in November last I caused an examination to be made of some of the afflicted cattle in the vicinity of Alexandria, Va. The investigation was conducted by Dr. Alban S. Payne, of Fauquier County, Virginia, who, as will be seen by his report below, pronounced the disease a contagious type of pleuro-pneumonia. The results of his investigation are thus given in the following brief extract from his report:

I visited Mr. Roberts's mill, one mile south of the city of Alexandria, Va., with as little delay, under existing circumstances, as possible. I found Mr. Roberts, in connection with his other business operations, carrying on a dairy. On his farm were sixty-two milch cows, and of these forty have had pleuro-pneumonia. Twenty-two have not as yet taken the disease. I also found almost in the heart of Alexandria City two cows sick with the disease. One of these cows belonged to Mr. Townsend Baggett, and the other to Colonel Suttle. I also examined about the suburbs of Washington City some sick cows. All the cases I saw were, without doubt, cases of pleuro-pneumonia of the non-malignant variety.

Knowing the insidious and destructive character of this disease, and that it was liable to assume a contagious form and cause the destruction of millions of dollars' worth of property, and interrupt and perhaps destroy one of our greatest commercial interests and sources of income, I called the attention of Congress to the existence of this fatal malady in my preliminary report, bearing date of November last, and asked the immediate intervention of the government by the enactment of measures for its suppression and extirpation. The following is a brief extract from this report:

One of the most dreaded contagious diseases known among cattle is that of pleuro-pneumonia or lung fever. It was brought to this country as early as the year 1843, and has since prevailed to a greater or less extent in several of the Eastern and a few of the Southern States. It made its appearance about a century ago in Central Europe, and has since spread to most European countries. With the exception of rinderpest, it is the most dreaded and destructive disease known among cattle. Unlike Texas cattle fever, which is controlled in our northern latitudes by the appearance of frost, this disease "knows no limitation by winter or summer, cold or heat, rain or drought, high or low latitude." It is the most insidious of all plagues, for the poison may be retained in the system for a period of one or two months, and even for a longer period, in a latent form, and the infected animal in the mean time may be transported from one end of the continent to the other in apparent good health, yet all the while carrying and scattering the seeds of this dreaded pestilence.

Since the appearance of this affection on our shores it has prevailed at different times in the States of Massachusetts, Connecticut, New York, New Jersey, Maryland, Delaware, Virginia, and in the District of Columbia. It has recently shown itself at two points in Virginia (Alexandria and Lynchburg), where it was recently prevailing in a virulent form.

At present the disease seems to be circumscribed by narrow limits, and could be extirpated with but little cost in comparison with the sum that would be required should the plague be communicated to the countless herds west of the Alleghany Mountains. This disease is of such a destructive nature as to have called forth for its immediate extirpation the assistance of every European government in which it has appeared, many of them having found it necessary to expend millions of dollars in its suppression. The interests involved in this case are of so vast a character, and of such overshadowing importance, both to the farming and commercial interests of the country, as to require the active intervention of the Federal Government for their protection, and for this reason the considerate attention of Congress is respectfully asked to this important matter.

Prof. F. S. Billings, V. S., temporarily residing in Germany, writes under recent date as follows:

BERLIN, January 16, 1879,
14 *Louisen Street.*

MY DEAR SIR: I intended in my last to have mentioned some ideas for your consideration upon the so-called contagious pleuro-pneumonia of cattle in the United States.

I have given the subject a long-continued consideration, and it seems to me the views which now appear conformable to our case will find their approval with you. The disease is one which is rather a new thing to us, and while we find cases coming to pass in many sections, still we cannot say it has acquired any devastating extension. I truly believe that by using what means we have at command, and by fixing two or at the most three points by which cattle can be imported from Canada, and by furthermore exacting that such cattle be accompanied by attested health certificates of competent men, and furthermore that all such cattle, except when destined for immediate slaughter, be compelled to undergo twenty days of quarantine at point of entry, when unaccompanied by such certificates; like rules applied to sea-ports—if we can make and enforce such regulations, then in one year at the most we can stamp the disease out of the United States, and keep it out. For us the inoculation should be absolutely forbidden and severely punished. It is only of value in localities where the disease has become almost domesticated, and where of the two evils the lesser must be chosen, and that is, as is being attempted in Saxony, to inoculate every animal, and produce as soon as possible the artificial disease; all newly introduced animals to be by law at once inoculated.

This renders the losses less severe to such a community, probably not over 25 to 30 per cent., if as much; statistics as yet are unreliable. But it is self-evident this is also a way by which the disease is rendered a constancy—it becomes domiciled, a thing we do not desire. Hence I recommend to your consideration the absolute killing of every infected and exposed animal, or, perhaps, after quarantining—isolation of the latter under rigid inspection. The slaughtered animals to be paid for at full market price, real, not fancy, by the respective State governments, or, better, by the general government; for, if we are to have a general law, then the general government must take care of it. I earnestly recommend your bringing this to the attention of Congress, and you yourself must see the recommendation is logical and true to the country's interest. The first costs might be a little startling, but the final results equally fortunate. The rinderpest was at last reports limited and decreasing.

Your obedient servant,

F. S. BILLINGS.

To Hon. WM. G. LE DUC,

Commissioner of Agriculture, Washington, D. C.

Professor Gadsden, of Philadelphia, who recently made an examination of infected and diseased cattle on Long Island, writes as follows:

134 NORTH TENTH STREET,
Philadelphia, January 29, 1879.

SIR: I consider it my duty to report to you that the contagious disease known as "pleuro-pneumonia" exists to a frightful extent among the cows near Brooklyn, Long Island. On the return of Professor McEachran, the cattle-inspector of Canada, from Washington, he asked me to accompany him to New York State, and find out for ourselves if the report was true that a contagious disease existed. We found it too true, as at a distillery at Williamsburg we found a large byre or cow-house, containing about eight hundred cows, with very many of them in the last stages of "contagious pleuro-pneumonia." Others had this disease in a milder form. The place was very dirty, the cows very much crowded, ceiling low, and everything favorable for the rapid spread of this disease.

The cows belong to a number of milkmen, who keep them there very cheap on hot swill (from the distillery) and hay, which increases the milk very much. This place is a regular pest-house for the disease. We were informed, on good authority, that just before the cows die they are killed and dressed, then sent into the New York market as beef, where we are told that they bring a good price because they are tender and not too fat. Others are sold when the milk dries up, to farmers on Long Island.

This disease is very prevalent within a few miles of Brooklyn, and has been for some time. Cannot you, sir, try and stamp it out? as I am afraid if it spreads from there the English Government will not receive any cattle from our ports, as they have a law ready to put into force as soon as they are satisfied this or any contagious disease exists in cattle. I have made inquiry from several veterinary surgeons in this State; they all answer there is no contagious diseases in cattle in their district. I have no reason to believe there is any in Pennsylvania or in the Western States, so I do hope this disease on Long Island will not interfere with the sending of live cattle from Philadelphia to England, as I know they are making great preparations for this spring's trade.

Respectfully, &c.,

J. W. GADSDEN, F. S.

Hon. WM. G. LE DUC,

Commissioner of Agriculture.

On the morning of the 30th of January, 1879, the following telegrams appeared in the metropolitan journals:

TORONTO, ONTARIO, *January 30.*

Intelligence of the slaughtering of cattle lately shipped to Liverpool on a steamship creates an anxious feeling among dealers here. On or about the 14th instant the steamship Ontario sailed from Portland for England with a cargo of cattle, the shippers being Messrs. T. Crawford & Co., of this city. The cattle numbered 265 head, and were, according to Mr. Crawford's statement, in sound condition, having been examined by competent men at both Montreal and Portland. The Ontario reached Liverpool on Sunday last, and on the following day Messrs. Crawford & Co. received a cable dispatch from their agent there that the cattle had been detained for inspection by order of the British Government. This inspection was evidently attended with unsatisfactory results, for on Tuesday the agent cabled that the cattle had been condemned on account of disease and were to be slaughtered. The disease was said to be pleuro-pneumonia. The Toronto Exportation Company and Messrs. Crawford & Co., the two firms that do the largest shipping business in their line in the city, were instructed by their agents to ship no more. The first named have a cargo of 170 head on the steamship State of Alabama, which it is anticipated will arrive at Liverpool on Friday next. What will become of these remains to be seen. The general feeling is that it is not at all likely that a trade which was rapidly becoming a necessity for England will be allowed to suffer interruption for any great length of time without a good cause for the embargo being adduced.

OTTAWA, ONTARIO, *January 30.*

Information having been received that the British Government had totally prohibited the importation of cattle from the United States, the cabinet met last evening to consider the situation. The result of the meeting was the adoption of a resolution that steps would be taken to prevent any injury being done to Canada.

MONTREAL, QUEBEC, *January 30.*

Considerable anxiety exists in regard to the order from the imperial government prohibiting the importation of Canadian cattle into England. It is said if the order is continued, cattle will be slaughtered here and the meat will be taken across in refrigerators.

On the morning of January 31 I received the following note from Hon. A. W. Cutler, chairman of the Agricultural Committee of the House of Representatives:

WASHINGTON CITY, D. C., *January 31, 1879.*

SIR: Learning incidentally of the fear of contemplated action by the British Government, I addressed you a letter yesterday touching the subject-matter, with the expression of the hope that early information from your department, with your views and suggestions in reference to it, so that such legislation (if practicable) could be immediately had as would either stamp out the disease or hedge it in, and the threatened action by the English Government might be prevented which would result in serious damage to a growing and increasing revenue to our people, both as producers and shippers.

Yours, truly,

AUGS. W. CUTLER,
Chairman.

Hon. WM. G. LE DUC,
Commissioner of Agriculture.

The following letter will explain itself:

AMERICAN VETERINARY COLLEGE,
New York, February 1, 1879.

SIR: In returning from Washington, where he had the honor of seeing you, Professor McEachran, of Canada, asked me if pleuro-pneumonia was to be found in New York State. I took him to Long Island, and there had the opportunity to show him a barn where a large number of cows (some 600) are kept, and where we found ourselves in the difficult task, not to detect diseased animals, but to discover healthy cows. *Post-mortems* confirmed our diagnosis, so that no doubt can be had of its correctness.

The milk and the carcasses of these diseased subjects find their way to our market in New York City. Our boards of health have no veterinarian to detect the disease

and enforce the laws! Our market meat-inspectors are deficient in detecting diseased from healthy meat! Our cattle are exposed to the spreading of that fearful disease! Our exportation is now impeded to such extent that to-day I am told animals exported to France even must have a clean bill of health, and England is threatening closing her ports to our stock!

May I respectfully be allowed to call your attention to this state of affairs, and to place myself at your orders for whatever professional assistance I may be able to give your department in overcoming this great danger to our European cattle trade and to our own live stock.

I am, sir, your obedient servant,

A. LIAUTARD.

Hon. W. G. LE DUC,
Commissioner of Agriculture.

On the 4th instant I received the following telegram from Mr. J. B. Sherman, superintendent of the Chicago Union Stock-Yards:

UNION STOCK-YARDS, *Chicago, Ill., February 4, 1879.*

THE COMMISSIONER OF AGRICULTURE:

The most important blow struck at the interest of this city, State, and Northwest is the report in circulation in reference to the prevalence of cattle disease in the West, and these reports are absolutely false. I have sent a telegram to the Secretary of State, on whom I wish you would at once call.

This business of the export of live cattle to England has developed immense proportions in the last year, and we must not, cannot, remain quiet and see it destroyed. It is worth millions to the country, and affects directly every farmer in the Northwest, while the whole country feels the effect of this large increase in its exports. The action of the British and Canadian Governments is based on a misconception of the facts, and we need such final investigation as will put the matter at rest.

J. B. SHERMAN,
Superintendent.

To which the annexed reply was at once forwarded:

DEPARTMENT OF AGRICULTURE,
Washington, D. C., February 4, 1879.

J. B. SHERMAN,
Superintendent Union Stock-Yards, Chicago, Ill.:

The disease to which your telegram refers appeared in this country as early as 1843, and there is no more reason for the present action of the British Government in this matter than has existed for years past. Pleuro-pneumonia has never troubled the cattle-breeders of the West, from whence alone cattle for exportation are derived, but the existence of the disease on our eastern coast at all is a constant threat to the cattle-raising country beyond the Allegheny Mountains, for the extermination of which I have asked authority of Congress. I hope and expect that action will be taken that will speedily remove all excuse for the objectionable orders of the British Government.

WM. G. LE DUC,
Commissioner of Agriculture.

On the recommendation of gentlemen largely interested in the live-stock trade, I at once made the following appointment of an examiner for the port of New York:

DEPARTMENT OF AGRICULTURE,
Washington, D. C., February 5, 1879.

SIR: You are hereby appointed an examiner, and directed to make as thorough inquiry and examination as the owners and shippers of stock will permit into the condition of the live stock sent, or about to be sent, from your port, and certify daily to this department the health of each particular shipment, so far as possible, examining particularly as to pleuro-pneumonia in cattle, and noting the presence or absence of this disease in each case. You are authorized to give a copy of your certificate for the department to the shippers, if desired.

WM. G. LE DUC,
Commissioner of Agriculture.

JOHN J. CRAVEN,
Jersey City, N. J.

I also forwarded a like appointment by telegraph to H. J. Detmers, V. S., Chicago, Ill., and received prompt replies from both accepting the positions tendered.

These examiners were also directed to furnish a certificate of health to such shippers of live stock as might desire it, a copy of which is herewith appended :

INSPECTION OF CATTLE FROM THE PORT OF ———, AUTHORIZED BY THE UNITED STATES GOVERNMENT, AND UNDER THE IMMEDIATE DIRECTION OF THE COMMISSIONER OF AGRICULTURE.

This is to certify that I have this day inspected ——— beef cattle, owned by Messrs. ———, to be shipped by them upon ———, sailing February —, for the port of Liverpool, England, and found the animals sound.

Dated February —, 1879.

(Signed)

—————, Inspector.

These letters were promptly followed by the following, addressed to the Secretary of the Treasury, informing him of the action taken by this department :

DEPARTMENT OF AGRICULTURE.

Washington, February 5, 1879.

SIR: I have the honor to inclose for your information a copy of a letter this day addressed to Mr. John J. Craven, of Jersey City, N. J. I have also telegraphed to Dr. Detmers, of Chicago, substantially the same instructions as are noted in Dr. Craven's letter.

So far as the limited funds at the command of the department will permit, the proposed examinations will be continued, with the view of furnishing shippers information relative to the health of their stock, and thus prevent the shipment of any that are diseased : and the certificate of the veterinary surgeon of this department making the examination will be in the nature of a "bill of health," and should go far towards allaying any apprehensions, real or fancied, which may be entertained by persons who receive the stock.

This department is ready to second any efforts made by the Treasury Department to quiet the unnecessary excitement now apparent in Europe and in our own country on this subject.

Respectfully, your obedient servant,

WM. G. LE DUC,
Commissioner.

HON. JOHN SHERMAN,
Secretary of the Treasury.

To which the following reply has been received :

TREASURY DEPARTMENT,

OFFICE OF THE SECRETARY.

Washington, D. C., February 7, 1879.

SIR: I am in receipt of your letter of the 5th instant, inclosing a copy of one addressed by you to Dr. John J. Craven, of Jersey City, N. J., authorizing him to make inquiries into the condition of live stock about to be sent from that port to foreign countries, and to certify daily to your department the health of each particular shipment as far as possible.

I inclose herewith for your information twelve copies of a circular issued by this department, under date of the 1st instant, requiring as a condition precedent to the shipment of live cattle abroad an examination thereof by the customs-officers with reference to their freedom from disease, and the issuance of a certificate by the collector that they are free from such disease, if the facts shall be found to warrant it.

Doubtless Dr. Craven, and any other person appointed by your department for the purpose named, could give valuable aid to the collectors of the ports from which such shipments are made, and this department would be pleased if you would instruct the experts selected by you to afford aid to the customs-officers in this respect as far as possible.

You will see that the circular requires that the officers of the customs shall also furnish this department from time to time such information upon the subject as they may be able to procure, and I would be pleased if you will also forward such information as you receive it.

This department has furnished the State Department with copies of the circulars before mentioned, and the Secretary of State has doubtless furnished them to the proper representative of the British Government.

This department perceives the importance of protecting its export trade in live animals as far as possible, and will do all in its power to attain the desired object.

Very respectfully,

JOHN SHERMAN,
Secretary of the Treasury.

Hon. WM. G. LE DUC,
Commissioner of Agriculture.

The following is a copy of the circular inclosed by the Secretary of the Treasury:

[Circular.]

INFORMATION IN REGARD TO CATTLE DISEASE.

TREASURY DEPARTMENT,
Washington, D. C., February 1, 1879.

To collectors of customs and others:

By department's circular of December 18, 1878, it was directed that live cattle shipped from the various ports of the United States might be examined with reference to the question whether they were free from contagious diseases, and that, if found to be free from such diseases, a certificate to that effect should be given.

By that circular such inspection was not made compulsory, but the certificate was to be issued only upon the application of parties interested.

As the export trade in live cattle from the United States is of vital importance to large interests, every precaution should be taken to guard against the shipment of diseased animals abroad, and such a guarantee given as will satisfy foreign countries, especially Great Britain, that no risk will ensue from such shipments of communicating contagious or infectious diseases to the animals in foreign countries by shipments from the United States.

Collectors of customs are, therefore, instructed that in no case will live animals be permitted to be shipped from their respective ports until after an inspection of the animals with reference to their freedom from disease, and the issuance of a certificate showing that they are free from the class of diseases mentioned.

Notice of rejected cattle should be promptly given to this department.

In order that this department may be fully informed in regard to such diseases in any part of the United States, collectors of customs are requested to promptly forward to this department any information which they may be able to obtain of the presence of contagious or infectious diseases prevailing among live animals in their vicinity.

It is probable that if the disease prevails to any considerable extent it will be noticed in the local press, and collectors are requested to send copies of any such notices to this department for its information.

JOHN SHERMAN,
Secretary.

The following letter has been received from Prof. James Law, who, it will be seen, has been ordered to the port of New York by the governor of that State:

ASTOR HOUSE, *New York, February 8, 1879.*

DEAR SIR: I came down here last night in accordance with instructions from the governor of New York to ascertain and report as to the existence of the lung fever in cattle. From what I have seen to-day I have no doubt of its existence in Kings and Queens counties, but I hope very soon to be able to report on the *post-mortem* lesions as well as the *ante-mortem* symptoms.

I hear that the malady exists in Watertown, Conn., perhaps at Ratonah, Westchester County, New York, and around Newark, N. J. The two first places I expect to visit in the interests of New York, and I shall find out what I can about the vicinity of the shipping yards for the stock exported to Great Britain. Would it be well for me to visit Newark also before returning?

I strongly commend the position you have taken in this matter, as the only just and tenable one. If we should ever suffer from a temporary suspension of the foreign trade in cattle, it will be well expended if it should lead to a thorough extinction of the lung plague in the United States.

Yours, very truly,

JAMES LAW.

Hon. WM. G. LEDUC,
Commissioner of Agriculture.

The following late telegrams, showing the action of the British Government, are appended :

THE AMERICAN CATTLE TRADE—NO FURTHER INTERFERENCE EXPECTED.

LONDON, *February 8.*

A committee of the Cattle Trade Association at Liverpool, in order to avoid interruption to the trade, have offered to erect the necessary lairage and abattoirs to comply with the requirements of the Privy Council. It is believed, however, that, in consequence of the growing importance of the trade to Liverpool, either the authorities or the corporation or the dock board will undertake the work. All arrivals of cattle from America since the steamer Ontario's cargo have been found entirely free from disease. The severity of the weather, therefore, it is believed caused the outbreak in that instance. The British Government is, under the circumstances, not inclined to interfere with the importation of cattle from America, provided there is adequate inspection before shipment and provision of the required lairage at Liverpool to put them in position to meet such cases as the Ontario's. It is not believed that slaughter on the quays will be enforced where no disease exists. Persons in the trade say that under these conditions American shippers need not fear any interference with the business.

LONDON, *February 9.*

In regard to the importation of cattle from America, no action of the Privy Council has been made known since the notice read in the Liverpool town council on February 5, that cattle cannot be landed at the Liverpool docks after March 1, unless provision is made for slaughter on the quay.

THE CATTLE EXPORT TRADE—EFFECT OF THE BRITISH ORDER IN COUNCIL.

LIVERPOOL, *February 11.*

The order of the Privy Council adopted yesterday revoking after March 3, 1879, article 13 of the foreign animals order so far as it relates to the United States was a great surprise to the trade here. All cattle from the United States after March 3 will have to be slaughtered in abattoirs now being prepared on the dock estates of Birkenhead and Liverpool within ten days after landing.

I also forward you articles on the subject of pleuro-pneumonia, clipped from the National Live Stock Journal of March, 1878, and November, 1878. They were inclosed to me and my attention directed to them by Mr. J. H. Sanders, the editor of the Journal.

[From the National Live Stock Journal of March, 1878.]

THE GREATEST DANGER TO OUR STOCK—THE LUNG FEVER—CONTAGIOUS PLEURO-PNEUMONIA.

The Journal has frequently called attention to the great dangers that beset our live stock from imported plagues of foreign origin. During the past year the sudden invasion of Western Europe and England by the rinderpest roused the agricultural community from their dream of safety, and called forth from the Treasury an order remarkable alike for its promptitude and good intentions, and for the fatal blunders which rendered it worse than a dead letter. Once more there seems a prospect of a renewal of these apprehensions, the Russo-Turkish war having led to an extension of this cattle plague into Hungary, from which the Atlantic coast and Great Britain may be any day infected, owing to the activity of the stock trade. Should this unfortunately take place, it will find us no better prepared than we were a year ago, and our Treasury order, now in force, will freely invite the disease to enter, provided it makes its advent respectably—in the systems of *blooded stock*, and not in poor cross-bred animals, which it would be ruinous to import, even if sound. A similar welcome is extended, by implication, to all those ruminants which are devoted more particularly to luxury, and have not been degraded to such vulgar utilitarian objects as the production of meat or wool. Yet all ruminants are subject to rinderpest, and this malady was carried to France, in 1866, by two gazelles, as other plagues have often been carried to new countries by the privileged *blooded stock*.

But we started out to notice a danger which is no longer separated from us by the broad barrier of the Atlantic, and whose malign presence is not to be dismissed by any one of ten thousand contingencies, as is the case with the possible advent of the rinderpest. This danger stands in our midst, and is steadily gaining in force as it encroaches

further and further, showing how certain it is, if unchecked, to lay the whole country under contribution, and inflict most disastrous and permanent losses. The lung fever of cattle, imported into Brooklyn, L. I., for the first time, in 1843, in a Dutch cow, has never since been at any time entirely absent from our soil. From this center it has slowly and irregularly extended over a portion of New York, New Jersey, Pennsylvania, Maryland, Delaware, and Virginia, besides having repeatedly invaded Connecticut. The slowness of its extension has begotten a false sense of security, and no real apprehensions of serious consequences remain from an animal poison which has been for over a third of a century hidden away in the near vicinity of the Atlantic coast.

To disturb this comfortable and restful condition of the public mind is an unpleasant task, which nothing but the imperative sense of duty would compel us to undertake. But this disease has a history, which we can only ignore at our peril; and as its records can now be drawn from all quarters of the globe, we can have before us an unequivocal testimony as to what will inevitably happen under given conditions of climate, surroundings, and treatment.

England imported the lung fever of cattle in 1842, just one year before we did, was soon very generally infected, and has continued so to the present time. Up to 1869, it is estimated that England had lost, almost exclusively from this disease, 5,549,780 head of cattle, worth £83,616,854 (say \$400,000,000). For the succeeding nine years, up to 1878, the losses have been, in the main, as extensive, so that we may set them down as now reaching at least \$500,000,000 in deaths alone, without counting all the contingent expenses, of deteriorated health, loss of markets, progeny, crops, manure, &c., disinfection, quarantine, &c. With us no attempts have been made to estimate the losses, but they cannot exceed an inconsiderable fraction of those above named; and thus we have slept on in a pleasant dream of immunity.

It is even alleged that the disease has, in a great measure, been shorn of its virulent power, by being transplanted to the shores of the New World, and that we may comfort ourselves with this, and continue to ignore its presence. If, on the other hand, it can be shown that the difference is in no material respect affected by climate, but altogether determined by the surroundings, it will be well for us to attend to the facts of the case, and face the real danger. The lung fever, which had really entered England, by a special importation, some time before the free trade act of 1842, was, by virtue of this act, thrown upon her in constantly accumulating accessions. The ports at which the continental cattle were landed, and the markets in which they were sold—London (Smithfield Market), Southampton, Dover, Harwich, Hull, Newcastle, Edinburgh, &c.—insured the mingling of the imported stock, week by week, with the native store cattle. Then, if they failed to find a profitable sale, they were sent by cars to other and inland markets, where they were again and again brought into contact with numerous herds of store cattle, by which the germs of the disease were taken in, and carried all over the country.

With us, on the other hand, the disease was long confined to the dairies of Brooklyn and New York, where the cows were kept until they died, or were fattened for the butcher. A few doubtless found their way to the country, and by these the disease was carried to different farms, which were thus constituted centers of contagion from which the adjacent country became infected. But any such movement from the city dairies was necessarily of the most restricted kind, and it never took place to any great distance. It would have been folly to move a common milk cow, worth \$40 to \$70, to the West, where she could be bought for one-half or one-third of that sum. The same deterrent condition existed in the ease of the farms on which the diseased city cows had been brought. Sales were no doubt occasionally made from infected herds, to secure the apparent value of an animal which the owner had good reason to believe to be doomed, and as such animals would, for obvious reasons, be sent as far from home as possible, this became a principal means of the formation of more distant centers of contagion, and the wider diffusion of the malady. But with us the disease has hitherto had to fight against the heaviest obstacles—the current of cattle traffic having been almost without exception from the cheaply-raised herds of the West to the profitable markets of the East. The exceptions have only been in the ease of thoroughbred stock, and hitherto our Western stock has escaped contamination by this means.

The wonder is not so much that the plague has failed to reach the West, but that in the face of such tremendous obstacles it has succeeded in invading all of the six or seven States that are now infected. In Great Britain, where some would have us believe that the disease is more virulent, we can point to a more satisfactory record. There the great body of the country has been infected for thirty-five years, but the greater part of the highlands, exclusively devoted to the raising of cattle and sheep, has enjoyed the most perfect immunity. Here, under nearly all possible predisposing causes of lung disease—altitude, exposure, cold, chilling rains, and fogs, the piercing blasts of the Atlantic and German Oceans—this contagious lung disease has never penetrated, though severely ravaging the lowlands immediately adjacent. The explanation is, that these hills support none but the native black cattle, and other breeds are never

introduced. In spite of the alleged virulence of the disease in England, it has proved powerless to enter this magic circle from which all but the native stock is excluded. The same holds true concerning some parts of Normandy, Brittany, the Channel Islands, Spain, Portugal, Norway, Sweden, &c.

The fact that the disease has maintained a foothold among us for thirty-four years, and in spite of all obstacles has made a slow but constant extension, is sufficient ground for the gravest apprehensions. A disease-poison which shows such an obstinate vitality and such persistent aggressiveness cannot be allowed to exist among us without the certainty of future losses which will eclipse those of Great Britain by as much as our herds of cattle exceed those of that nation. A recent outbreak in Clinton, N. J., caused by a cow brought from Ohio, suggests the possibility of the disease having already reached the latter State, an occurrence which was inevitable sooner or later, but the actual existence of which must enormously increase our dangers. With every such step westward there is the introduction of more diseased and infected cattle into the natural current of the traffic, and the earlier probability of the general infection of all parts to the east of such ultimate centers of disease. There is, further, the infection of more cattle ears which, carried west, may be the means of securing a rapid extension of the plague to our most distant States and Territories.

RELATIVE DANGERS OF THE POISONS OF LUNG FEVER AND OTHER PLAGUES.

The persistent vitality of the *lung-fever poison*, in comparison with that of any other animal plagues, is noteworthy. It has held a tenacious grasp on the United States for over a third of a century, though forbidden by circumstances to make a wide extension. *Aphthous fever* (foot and mouth disease), on the other hand, though twice imported into Canada within the last ten years, and on one occasion widely spread in New York and New England, was on each occasion easily and early extinguished, and with little or no effort on the part of the States. It might indeed almost be said to have died out of itself. Even the dreaded *rinderpest* has its poison early destroyed by free exposure to the air, in thin layers, at the ordinary summer temperature. Numerous experiments on hides hung up and freely exposed in warm weather, have shown that the infecting power is lost as soon as they are quite dried. But the poison of lung fever maintains its virulence for months in the dry state in buildings, and we have known parks, with sheds, that proved regularly infecting year after year to all cattle turned into them. In other cases we have known the virus carried for miles on the clothes of attendants, and thus introduced into new herds.

A far greater danger lies in the lengthened period during which the poison of lung fever remains dormant in the system. This averages about three weeks or a month, but may extend, in exceptional cases, to not less than two months. An ox or a cow which has been exposed to the contagion may, therefore, be carried from one extremity of the continent to the other, may be exposed in a succession of markets, and may change hands an indefinite number of times, and be all the while in the best apparent health, though infallibly approaching the manifestation of the disease, and for the latter portion of the time spreading the germs of the malady to others. There is here an opportunity for the unscrupulous to sell off exposed and infected animals without the purchaser having the least suspicion of foul play. There is also the strong probability of animals that have contracted the disease by accident, in ears or otherwise, in passing to a new home, mingling with the herd of the new owner and infecting them extensively before there is a suspicion that anything is amiss. This long period of incubation after the animal is infected, and the equally long period of latency of the malady in animals he has infected, one or two of which only will be attacked at intervals of a month, lull suspicion as to the presence of contagion, and it is too often only after great damage has been done that the truth dawns on the mind.

In aphthous fever and rinderpest, on the other hand, the disease shows itself in from one to four days after infection, and the surrounding animals are so rapidly attacked after the coming of the infected stranger, that there is no room for hesitancy as to the existence of contagion. Nor can the victims of these diseases be carried far from the point where they have been infected and disposed of as sound animals, so that in the very vigor and promptitude of their action we have an excellent basis for their restriction and control.

DANGER OF INFECTION IN OUR UNFENCED STOCK RANGES.

It is needful to note the above-named insidious progress and stealthy invasions of the lung fever, and to contrast them with the more prompt and open manifestations of the other animal plagues, in order to show the great peril to which we are subjected by the presence in our midst of a *pestilence* which literally *walketh in darkness*. Let us now consider the prospective infection of our great stock ranges. That this is inevitable, though slow, at the present rate of progress of the plague, has been sufficiently

shown. That it might occur any day by an animal infected in an Eastern farm or stock-yard, or in a railroad car in which it was sent for the improvement of the Western herds, must be abundantly evident to every one who has read this article. If we now add the fact that more than one *thoroughbred Ayrshire* and *Jersey* herd has been infected with this disease during the past year, we are at once confronted with a strong probability of an early Western infection. Let us remember that thoroughbreds alone are carried West for improvement of native herds, and that a bull of the Ayrshire, Jersey, Holstein, or short-horn breed, taken from a herd now or recently infected, may be carried to any of our Western Territories and mingle for a month with the native herds before his own infection is so much as suspected; and we can conceive how imminent is the danger when the infection has reached our *Eastern thoroughbred cattle*.

To illustrate the result of the infection of our unfenced stock ranges, I must quote another page from the history of this disease in other countries. The instance of Australia is the most recent as well as the most striking. The lung fever was introduced into Melbourne in 1858, by a short-horn English cow, which died soon after landing. Having been confined to an inclosed place, there is every reason to believe that with her the disease would have ended, had not a teamster turned his yoke of oxen into the infected park under cover of the night. These oxen working on the streets infected others, the disease soon spread to the open country, and the mortality increased at an alarming rate. Vigorous measures for its suppression were adopted, thousands of infected and diseased cattle were slaughtered, but all proved of no avail. Not only were the free, roaming herds infected, but so many places were contaminated that it was soon perceived that help from this source was not to be expected. Destroy a whole infected herd, and you still left the infection in the station from which, in its unfenced state, other herds could not be excluded, and where they were certain to take in the germs of the malady. After enormous losses had been sustained by the combined operations of the pest and the pole-ax, it was concluded that the remedy was worse than the disease, and the colonists reluctantly fell back on the expedient of inoculation. This is based on the fact that the disease is rarely contracted a second time by the same animal, and it can be practiced on all calves with losses at the rate of from two to five per cent. only, so that the mortality is insignificant as compared with the thirty to fifty per cent. which perish where the affection is contracted in the ordinary way. The great objection to inoculation is, that it can only be practiced at the expense of a universal diffusion of the poison, and of its maintenance in a state of constant activity and growth. With such a universal diffusion of the virus, the stock owners are virtually debarred from introducing any new stock for improving the native breeds, or infusing new vigor or stamina, inasmuch as such new arrivals would almost certainly fall early victims to the plague. Australia, therefore, now suffers from the permanent incubus of the lung plague, and can only import high-class cattle at great risk.

This is an occurrence of yesterday, but it is only a repetition of the immemorial experience of the steppes of Russia. There we find the same conditions of great herds roaming free over immense uninclosed tracts, and all the facilities for an easy and wide diffusion of animal poisons. There, accordingly, we find the home, in all ages, of the animal plagues of the Old World. To these endless steppes Europe and European colonists owe their frequent invasions of *lung fever*, *rinderpest*, *aphthous fever*, and *sheep-pox*. To these are to be charged the losses, to be estimated only by many thousands of millions, which have repeatedly fallen on the other civilized countries of the world. From these steppes the disease has spread over the continent on the occasion of every great European war, dating from the expulsion of the Goths from Hungary by Atilla and his Huns, in A. D. 376, down to the present Turkish war, which has secured the extension of the rinderpest to Hungary at least. On these steppes, too, the Russian veterinarians believe the rinderpest, at least, to be an imported disease derived from Eastern and Central Asia, yet all their efforts to crush out this or the lung fever, though receiving the freest support from the Russian Government, have failed. The same conditions exist, to a large extent, at the Cape of Good Hope; and there, too, the lung fever, imported in 1854, has acquired a permanent residence.

PREVENTIVE MEASURES DEMANDED.

Such is the history. Now comes the question pregnant with weal or woe to our future stock, agricultural, and national interests: Shall we learn from the disastrous experience of others and extirpate the lung plague from the United States while it is still possible, or shall we sit quietly by with folded hands and await the inevitable, early or late, infection of our open Western stock ranges, and then repeat, for the benefit of other nations, the already twice-told tale of a desperate and extravagant but fruitless attempt to suppress a plague which we have criminally allowed to pass beyond our control? With or without a prodigal but vain effort to crush out the poison, the results may be thus summed up: The infection of stock-yards, loading-banks, cars, and markets, and a general diffusion of the plague over the Eastern States.

This would imply a national loss, by cattle disease, like that of England, but much more extensive in ratio with our great numbers of stock. Thus England, with her 6,000,000 head of cattle, has lost in deaths alone from lung fever in the course of forty years over \$500,000,000. We, therefore, with our 28,000,000, should lose not less than \$2,000,000,000 in the same length of time, allowing still a wide margin for the lower average value per head in America. And this terrible drain is for deaths alone, without counting all the expenses of deteriorated health in the survivors, of produce lost, of loss of progeny, of loss of fodder no longer safe to feed to cattle, of diminished harvests for lack of cultivation and manure, of quarantine and separate attendants whenever new stock is brought on a farm, of cleansing and disinfection of sheds and buildings, &c., which become absolutely essential in the circumstances.

We do not include the expense of supervising the trade, examining and quarantining the stock at the frontier of every State, and of the disinfection of cars, loading-banks, stock-yards, and markets. If such were resorted to, after an extensive infection of our Western herds by lung fever, the cattle trade would be virtually stopped. Thus a safe quarantine for store cattle could not be less than three weeks, and a registration and supervision for five weeks more on the farms to which they are taken, would be absolutely essential. Thus the quarantine yards and sheds would be continual centers of infection, and would require to be very extensive, thoroughly isolated from each other, and constantly and perfectly disinfected, the air as well as the solids, to prevent the infection of newly-arrived stock. Such an incubus upon the trade would amount to a virtual prohibition. In rinderpest, sheep-pox, and aphthous fever, quarantine is a comparatively simple and available expedient, as the disease shows itself within a week; but, in lung fever, with the germs lying unsuspected in the system for one or two months, a protective quarantine is practically impossible wherever an active cattle trade is carried on. Hence in the countries of Central and Western Europe, through which the active traffic from the East is carried on, a complete control is usually maintained over rinderpest and sheep-pox, while the peoples have resigned themselves to the prevalence of lung fever as an unavoidable infliction. The same holds in Great Britain. Twice within eleven years has she crushed out invasions of rinderpest, and repeatedly has the same thing been accomplished for sheep-pox; but the lung fever is accepted as a necessary evil, between which and her large importations of continental cattle she must make a deliberate choice.

Happily, in these United States we are as yet under no such compulsion. The lung fever on American soil is still confined to the Eastern States and to inclosed farms, from which it is quite possible to eradicate it thoroughly. Of this possibility we have abundant evidence, alike in the Old World and the New. In several countries of Western Europe, through which there is no continuous cattle traffic between nations on opposite sides, this disease has been killed out and permanently excluded by an intelligent veterinary sanitary supervision. Sweden imported the disease in Ayrshire stock in 1847, but at once circumscribed the infected herds and places, slaughtered the diseased, disinfected all with which they had come in contact, and promptly extinguished the outbreak. Denmark, invaded the same year from a similar source, and on several subsequent occasions from Holland and England, as often quenched the poison by analogous measures. Oldenburg, Schleswig, and Norway, successively invaded by the importation of infected Ayrshires, in 1858, 1859, and 1860, respectively, enjoyed a similar happy riddance, through the application of the same system of suppression. Switzerland, long slandered as the native home of the lung plague, has at last awoke to the truth of the statement of the immortal Haller, made more than a century ago, that this disease only occurs "when an animal has been brought from an infected district"; and by the judicious use of suppressive measures, has permanently rid the country of the pestilence, and demonstrated that their Alpine air is as clear and wholesome for beast as for man.

In America, Massachusetts and Connecticut have furnished examples equally striking. The former imported the disease in Dutch cattle in May, 1859. In April, 1860, when it had gained nearly a year's headway, an act was passed, and a commission appointed, with full power to extirpate it. After the slaughter of 932 cattle, it was believed that this had been achieved; but new centers of infection were discovered in the two succeeding years, and it was not until 1865 that the commonwealth was purged of the poison. Since that year, the lung fever has been unknown in Massachusetts. Connecticut has had a similar experience. Her proximity to New York City and Long Island has brought upon her a series of invasions; but, profiting by the experience of her neighbor, she has, on each occasion, grappled successfully with the enemy, and driven him from her midst.

What has been done by the Scandinavian nations, by Oldenburg and Switzerland, by Massachusetts and Connecticut, can be done by all of our Eastern States. On this point the teaching of history is as unequivocal as on the certainty of the irreparable results if our open Western stock ranges were infected. The one indispensable prerequisite to success is the vigorous and simultaneous action of the various infected States, and its persistent maintenance until the last infected beast has disappeared

and the last contaminated place or thing has been purified. It matters little whether controlled by State or national government, if vigor and uniformity of action can be secured; but, as such combined and unflagging work is necessary, it could be best controlled by an intelligent central authority. The United States Government is as much called upon to defend her possessions against an enemy like this—so implacable, so relentless, and so certain, if not repelled, to lay us under an incubus which will increase with the coming centuries, and dwarf the prosperity to which we are entitled—as against the less insidious one who attacks us openly with fire and sword. Let the national Congress consider this matter well. Let every stock-owner press it upon his Representative as a matter that cannot be safely ignored even for a single day. Let boards of agriculture, farmers' clubs and conventions, granges, and all citizens who value the future well-being of the nation, unite in a strong representation on the subject. If the present Congress should neglect it, let citizens make it a test question to every future candidate for their suffrages, and elect only such as are pledged to carry suppressive measures into effect. The danger threatens all classes alike, though the first sufferers will be the stock-owners; for every tax upon production necessarily enhances the value of the product; and, as agricultural progress must be seriously retarded, the tax will not fall upon meat alone, but upon every product of the farm. Nothing can excuse a continued neglect of this subject, the dangers surrounding which increase from day to day, and the final results of which, if once it reaches our Western and Southern States and Territories, can only be computed by the prospective increase of our population and our herds of cattle. For this is not like an evil preying on our currency, banking, trade, or manufactures, the full extent of which may be, in a great measure, seen from the beginning, and the repair of which may be at any time inaugurated by legislative enactment. The animal plague only increases its devastations as we increase the numbers of our herds, and threatens soon to acquire an extension to which no legislation can oppose a check, and a prevalence in the face of which the most desperate efforts of the nation will prove of no avail. Thus, our cattle are increasing at the rate of 13,500,000 every ten years, so that, by the end of this century, they may be exactly doubled, with a prospective loss, if our Western and Southern ranges are infected, of \$130,000,000 yearly in deaths alone.

The choice is now in our power. So far as we know, our stock-raising States and Territories are still unaffected. We can still successfully meet and expel the invader; next year it may be too late.

[From the National Live Stock Journal of November, 1878.]

OUR GOVERNMENT AND THE ENGLISH CONTAGIOUS DISEASES ACT.

By an Associated Press dispatch from Washington we learn that "The Secretary of State has been officially notified of the passage of an act by the British Parliament, entitled 'The Contagious Diseases (Animal) Act, 1878,' under which, except in the case of countries specially exempted by the Privy Council, in whole or in part, from the operations of the act, all animals landed from abroad in any part of the United Kingdom will, after the 1st of January next, be slaughtered at the port of debarkation. The British Government has also notified Secretary Evarts that, in case the United States desire to be exempted from the operations of the act, the lords will require a statement of the laws which regulate the importation of animals into this country, and the method adopted to prevent the spreading of any contagious disease when it exists in any part of the United States. Secretary Evarts has sent a copy of the act of the British Parliament to the Secretary of the Treasury, in order that he may furnish the desired information preliminary to any action being taken to have the animals shipped from the United States into the United Kingdom exempted."

We think it will puzzle the Secretary of the Treasury to find any methods that have been adopted by our general government "to prevent the spreading of any contagious disease when it exists in any part of the United States"; and if he will take the trouble to investigate the matter pretty thoroughly, he will find that *all* the regulations that have from time to time been ordered by his department to prevent the introduction of contagious and infectious diseases into the United States from foreign countries are practically worthless. When this fact comes to be reported to the British Government, it is not unlikely that the exemption which the United States now enjoys from the operation of the act will be revoked, notwithstanding our present comparative freedom from any diseases likely to be transmitted by exportation to England. When this condition of things is brought about, and the business of exporting fat cattle, sheep, and swine from this country to England—which has, within the past few years, grown to such enormous proportions, and exercised so powerful an influence upon prices in this country—comes to a sudden halt, we shall expect such a pressure to be brought to bear upon Congress as will compel the passage of some such act as that introduced into the House last May, by Hon. J. S. Jones, of Ohio, to which reference was made in these columns in June last.

But is it wise in us to await unfavorable action on the part of the British Govern-

ment, before taking such steps as will preclude all probability of this country being included in the prohibition? Clearly, the interest is too large, and the effect of adverse action on the part of the Government of Great Britain upon our farming community would be too disastrous, to justify us in taking any chances in the matter. The regulations now provided by law against the importation of plagues and infectious diseases from abroad are confessedly worthless; and as for the stamping out of such diseases when they do make their appearance, we have absolutely no law that is general in its operation. A few of the States have attempted it on their own account, but most of them have no laws at all upon the subject; and none can be effectual without the sanction of our general government, for Congress alone has the power to regulate commerce with foreign nations and between the several States.

It is imperative that early and efficient action be taken by our Congress upon this matter, if we would not have our present lucrative trade in fat cattle and sheep with England seriously crippled. Members of Congress are now at home among the people, and such a pressure ought to be brought to bear upon them as will compel them to act upon this question as soon as they reassemble at Washington.

In addition to the foregoing, I inclose you copies of the laws passed by the legislatures of Massachusetts and New York for the suppression and extirpation of the disease during its prevalence in those States, and the rules adopted and enforced by the British Government for the extirpation of this and other contagious diseases among farm animals in its Indian possessions.

All of which is respectfully submitted.

WM. G. LEDUC,
Commissioner of Agriculture.

Hon. A. S. PADDOCK,

Chairman Senate Committee on Agriculture, Washington, D. C.

MASSACHUSETTS.

LUNG FEVER OR PLEURO-PNEUMONIA OF CATTLE.

The following act, for the suppression and extirpation of the disease called pleuro-pneumonia among cattle, was passed by the Massachusetts legislature April 4, 1860:

AN ACT to provide for the extirpation of the disease called pleuro-pneumonia among cattle.

Be it enacted, &c., as follows:

SECTION 1. The governor is hereby authorized to appoint three commissioners, who shall visit without delay the several places in this commonwealth where the disease among cattle called pleuro-pneumonia may be known or suspected to exist, and shall have full power to cause all cattle belonging to the herds in which the disease has appeared, or may appear, or which have belonged to such herds since the disease may be known to have existed therein, to be forthwith killed and buried, and the premises where such cattle have been kept cleansed and purified; and to make such order in relation to the further use and occupation of such premises as may seem to them to be necessary to prevent the extension of the disease.

SEC. 2. The commissioners shall cause all cattle in the aforesaid herds not appearing to be affected by the disease to be appraised, before being killed, at what would have been their fair market value if the disease had not existed; and the value of the cattle thus appraised shall be allowed and paid out of the treasury of the commonwealth to the owner or owners thereof.

SEC. 3. Any person who shall knowingly disregard any lawful order or direction of said commissioners, or who shall sell or otherwise dispose of an animal which he knows, or has good reason to suspect, has been exposed to the aforesaid disease, shall forfeit a sum not exceeding five hundred dollars.

SEC. 4. The commissioners shall make a full report to the secretary of the board of agriculture of their proceedings, and of the result of their observations and inquiries relative to the nature and character of the disease.

SEC. 5. The commissioners shall duly certify all allowances made under the second section of this act, and other expenses incurred by them, or under their direction, in

the execution of their service, to the governor and council; and the governor is hereby authorized to draw his warrant therefor upon the treasury.

SEC. 6. This act shall take effect from its passage, and continue in force for the term of one year thereafter, and no longer.

[Approved April 4, 1860.]

On the 12th of June, 1860, the following additional acts were passed :

AN ACT concerning contagious disease among cattle.

SECTION 1. The selectmen of towns, and the mayor and aldermen of cities, in case of the existence in this commonwealth of the disease called pleuro-pneumonia, or any other contagious disease among cattle, shall cause the cattle, in their respective towns and cities, which are infected, or which have been exposed to infection, to be secured or collected in some suitable place or places within such city or town, and kept isolated; and when taken from the possession of their owners, to be maintained, one-fifth of the expense thereof to be paid by the town or city wherein the animal is kept, and four-fifths at the expense of the commonwealth, such isolation to continue so long as the existence of such disease or other circumstances renders the same necessary.

SEC. 2. Said selectmen and mayor and aldermen, when any such animal is adjudged by veterinary surgeon, or physician by them selected, to be infected with the disease called pleuro-pneumonia, or any other contagious disease, may, in their discretion, order such diseased animal to be forthwith killed and buried at the expense of such town or city.

SEC. 3. Such selectmen and mayor and aldermen shall cause all cattle which they shall so order to be killed, to be appraised by three competent and disinterested men, under oath, at the value thereof at the time of the appraisal, and the amount of the appraisal shall be paid as provided in the first section.

SEC. 4. Said selectmen and mayor and aldermen are hereby authorized to prohibit the departure of cattle from any inclosure, or to exclude cattle therefrom.

SEC. 5. Said selectmen and mayor and aldermen may make regulations in writing to regulate or prohibit the passage from, to, or through their respective cities or towns, or from place to place within the same, of any neat cattle, and may arrest and detain, at the cost of the owners thereof, all cattle found passing in violation of such regulations, and may take all other necessary measures for the enforcement of such prohibition, and also, for preventing the spread of any such disease among the cattle in their respective towns and cities, and the immediate vicinity thereof.

SEC. 6. The regulations made by selectmen and mayor and aldermen in pursuance of the foregoing section, shall be recorded upon the records of their towns and cities respectively, and shall be published in such towns and cities in such manner as may be provided in such regulations.

SEC. 7. Said selectmen and mayor and aldermen are authorized to cause all cattle infected with such disease, or which have been exposed thereto, to be forthwith branded upon the rump with the letter P, so as to distinguish the animal from other cattle; and no cattle so branded shall be sold or disposed of except with the knowledge and consent of such selectmen and mayor and aldermen. Any person without such knowledge and consent, selling or disposing of an animal known to be affected with such disease, or known to have been exposed thereto within one year from such sale or disposal, shall be punished by fine not exceeding five hundred dollars, or by imprisonment not exceeding one year.

SEC. 8. Any person disobeying the orders of the selectmen or mayor and aldermen, made in conformity with the fourth section, or driving or transporting any neat cattle contrary to the regulations made, recorded, and published as aforesaid, shall be punished by fine not exceeding five hundred dollars, or by imprisonment not exceeding one year.

SEC. 9. Whoever knows, or has reason to suspect the existence of any such disease among the cattle in his possession or under his care, shall forthwith give notice to the selectmen of the town or mayor and alderman of the city where such cattle may be kept, and for failure so to do shall be punished by a fine not exceeding five hundred dollars, or by imprisonment not exceeding one year.

SEC. 10. Any town or city whose officers shall neglect or refuse to carry into effect the provisions of section one, two, three, four, five, six, and seven, shall forfeit a sum not exceeding five hundred dollars for each day's neglect.

SEC. 11. All appraisals made under the provisions of this act shall be in writing, and signed by the appraisers, and the same shall be certified to the governor and council, and to the treasurer of the several towns and cities wherein the cattle appraised belong, by the selectmen and mayors and aldermen respectively.

SEC. 12. The selectmen of the towns and mayor and aldermen of the cities, are hereby authorized, when in their judgment it shall be necessary to carry into effect the purposes of this act, to take and hold possession, for a term not exceeding one year, within their respective towns and cities, of any lands, without buildings other than

barns thereon, upon which it may be necessary to enclose and isolate any cattle, and they shall cause the damages sustained by the owners in consequence of such taking and holding to be appraised by the assessors of the town or city wherein the lands so taken are situated, and they shall further cause a description of such land, setting forth the boundaries thereof, and the area as nearly as may be estimated, together with said appraisal by the assessors, to be entered upon the records of the town or city. The amount of said appraisal shall be paid as provided in the first section, in such sums and at such times as the selectmen or mayor and aldermen respectively may order. If the owner of any land so taken shall be dissatisfied with the appraisal of said assessors, he may, by action of contract, recover of the town or city wherein the lands lie, a fair compensation for the damages sustained by him; but no costs shall be taxed unless the damages recovered in such action, exclusive of interest, exceed the appraisal of the assessors. And the commonwealth shall reimburse any town or city four-fifths of any sum recovered of such town or city in any such action.

AN ACT in addition to an act concerning contagious diseases among cattle.

SECTION 1. In addition to the commissioners appointed under the provisions of chapter one hundred and ninety-two of the acts of the year one thousand eight hundred and sixty, the governor, by and with the advice and consent of the council, is hereby authorized to appoint two additional persons to constitute, with those now in office, a board of commissioners upon the subject of pleuro-pneumonia, or any other contagious disease now existing among the cattle of the commonwealth.

SEC. 2. When said commissioners shall make and publish any regulations concerning the extirpation, cure, or treatment of cattle infected with, or which have been exposed to the disease of pleuro-pneumonia, or other contagious disease, such regulations shall supercede the regulations made by selectmen of towns and mayors and aldermen of cities, upon the same subject-matter, and the operation of the regulations made by such selectmen and mayors and aldermen shall be suspended during the time those made by the commissioners as aforesaid shall be in force. And said selectmen and mayors and aldermen shall carry out and enforce all orders and directions of said commissioners, to them directed, as they shall from time to time issue.

SEC. 3. In addition to the power and authority conferred on the selectmen of towns and mayors and aldermen of cities, by the act to which this is in addition, and which are herein conferred upon said commissioners, the same commissioners shall have power to provide for the establishment of a hospital or quarantine in some suitable place or places, with proper accommodations of buildings, land, &c., wherein may be detained any cattle by them selected, so that said cattle so infected and exposed may be there treated by such scientific practitioners of the healing art as may be there appointed to treat the same. And for this purpose said commissioners may take any lands and buildings in the manner provided in the twelfth section of the act to which this is an addition.

SEC. 4. The governor, by and with the advice and consent of the council, is hereby authorized to appoint three competent persons to be a board of examiners to examine into the disease called pleuro-pneumonia, and who shall attend at the hospital at quarantine established by the commissioners mentioned in the foregoing section, and there treat and experiment upon such number of cattle, both sound and infected, as will enable them to study the symptoms and laws of the disease, and ascertain, so far as they can, the best mode of treating cattle in view of the prevention and cure of the disease, and who shall keep a full record of their proceedings, and make a report thereon to the governor and council, when their investigation shall have been concluded: *Provided*, That the expense of said board of examiners shall not exceed ten thousand dollars.

SEC. 5. The selectmen of the several towns, and the mayors and aldermen of the several cities, shall, within twenty-four hours after they shall have notice that any cattle in their respective towns and cities are infected with, or have been exposed to, any such disease, give notice in writing to said commissioners of the same.

SEC. 6. The commissioners are authorized to make all necessary regulations for the treatment, cure, and extirpation of said disease, and may direct the selectmen of towns and mayors and aldermen of cities to enforce and carry into effect all such regulations as may, from time to time, be made for that end; and any such officer refusing or neglecting to enforce and carry out any regulation of the commissioners, shall be punished by fine not exceeding five hundred dollars for every such offence.

SEC. 7. The commissioners may, when in their judgment the public good shall require it, cause to be killed and buried any cattle which are infected with, or which have been exposed to said disease, and said commissioners shall cause said cattle to be appraised in the same manner provided in the act to which this is an addition; and the appraised value of such cattle shall be paid, one-fifth by the towns in which said cattle are kept, and the remainder by the commonwealth.

SEC. 8. Whoever shall drive or transport any cattle from any portion of the common-

wealth east of the Connecticut River to any part west of said river before the first day of April next, without consent of the commissioners, shall be punished by fine not exceeding five hundred dollars, or by imprisonment in the county jail not exceeding one year.

SEC. 9. Whoever shall drive or transport any cattle from any portion of the commonwealth into any other State before the first day of April next, without the consent of the commissioners, shall be punished by fine not exceeding five hundred dollars, or by imprisonment in the county jail not exceeding one year.

SEC. 10. If any person fails to comply with any regulation made, or with any order given, by the commissioners, he shall be punished by fine not exceeding five hundred dollars, or by imprisonment not exceeding one year.

SEC. 11. Prosecutions under the two preceding sections may be prosecuted in any county in this commonwealth.

SEC. 12. All appraisals made under this act shall be in writing and signed by the appraisers and certified by the commissioners, and shall be by them transmitted to the governor and council, and to the treasurers of the several cities and towns wherein the cattle appraised were kept.

SEC. 13. The provisions of chapter one hundred and ninety-two of the acts of one thousand eight hundred and sixty [except so far as they authorize the appointment of commissioners] are hereby repealed, but this repeal shall not affect the validity of the proceedings heretofore lawfully had under the provisions of said chapter.

SEC. 14. The commissioners and examiners shall keep a full record of their doings, and make report of the same to the next legislature, on or before the tenth day of January next, unless sooner required by the governor; and the said record, or an abstract of the same, shall be printed in the annual volume of Transactions of the State Board of Agriculture.

SEC. 15. The governor, with the advice and consent of the council, shall have power to terminate the commission and board of examiners whenever, in his judgment, the public safety may permit.

STATE OF NEW YORK.

AN ACT to prevent the introduction and spread of the disease known as rinderpest, and for the protection of the flocks and herds of sheep and cattle in the State of New York from this and other infectious and contagious diseases. Passed April 20, 1866.

Be it enacted by the Senate and Assembly of New York:

SECTION 1. It shall be the duty of the health officer of the port of New York, in addition to the duties now imposed on him by existing law, to examine and inquire whether any animals are brought in any vessels arriving at said port in violation of any regulation of law passed by the Congress of the United States prohibiting the importation of such animals.

2. Whenever any animal brought as a ship's cow, with no intention of landing the same or of violating any such law or regulation of Congress as aforesaid, the same shall be carefully examined and kept in quarantine for the space of at least twenty-one days, and if any symptoms of the infection or incubation of the disease commonly known as the rinderpest or any other infectious or contagious disease shall present themselves, it shall be the duty of the said health officer immediately to cause the said animal or animals to be slaughtered, and their remains boxed with a sufficient quantity of quick-lime, sulphate of iron, or other disinfectant, and with sufficient weights placed in said box to prevent the same from floating, and to be cast into the waters of the said port. It shall also be his duty to cleanse and disinfect by suitable agencies the berth or section of the ship in which said animal or animals were lying or slaughtered, and also to cause the clothing and persons of all taking care of the same or engaged in slaughter and burial to be cleansed and disinfected.

3. William Kelley, of Dutchess County, Marsena R. Patrick, of Ontario County, and Lewis F. Allen, of Erie County, are hereby appointed as commissioners under this act, and with powers and duties as hereinafter enumerated.

4. In the event of any such disease as the rinderpest or infectious disease of cattle or sheep breaking out or being suspected to exist in any locality in this State, it shall be the duty of all persons owning or having any interest whatever in the said cattle, immediately to notify the said commissioners or any one of them of the existence of such disease; whereupon the said commissioners shall establish a sanitary cordon around such locality. And thereupon it shall be the duty of the said commissioners to appoint an assistant commissioner for such district with all powers conferred by this act on the said commissioners or their agents or appointees, which said assistant commissioner shall immediately proceed to the place or places where such disease is reported to exist, and cause the said animal or animals to be separated from all connection or proximity with or to all other animals of the ruminant order, and take

such other precautionary measures as shall be deemed necessary; and if in his opinion the said disease shall be incunable or threaten to spread to other animals, to cause the same immediately to be slaughtered, their remains to be deeply buried and all places in which the said animals have been confined or kept, to be cleansed and disinfected by any of the agencies above mentioned; and also to cause the same to be carefully locked or barred so as to prevent all access to the same by any animals of a like kind for a period of at least one month. Any animal thus slaughtered shall be appraised under the supervision of said commissioners, and one-half of the value of said animal shall be paid by the State to the owner thereof.

5. It shall be the duty of the said assistant commissioner, immediately on his being notified of his appointment, or at any time thereafter, of the breaking out of the said disease in any place contiguous to the same and within the county in which he resides, to give public notices of the same in at least one newspaper printed or published in the said county, and to cause notice to be posted up in at least five conspicuous places in said neighborhood, and it shall be his duty to enjoin, in said notice and otherwise, all persons concerned in the care or supervision of neat cattle or sheep not to come within one hundred feet of the said locality without the special permission of the said assistant commissioner.

6. It shall be the duty of the commissioners appointed under this act, whenever they are advised that any such disease has made its appearance within the limits of the State, to publish in the State paper and in at least one paper published in any county where such disease exists, a statement of the methods approved by the New York Agricultural Society for the treatment of cattle affected therewith, for the isolation of the same, for the disinfection of the premises or building in which said cattle are found affected as aforesaid, and for the prevention of the spread of the same through any agencies of whatever kind.

7. The commissioners aforesaid, and all such assistants as they may appoint, whenever in their judgment or discretion it shall appear in any case that the disease is not likely to yield to any remedial treatment, or whenever it shall seem that the cost or worth of any such remedial treatment shall be greater than the value of any animal or animals so affected, or whenever in any case such disease shall assume such form of malignity as shall threaten its spread to premises, either contagious or infectious or otherwise, are hereby empowered to cause the said animals to be slaughtered forthwith and buried, as above provided, and to do all such things as are mentioned in the fourth section of this act.

8. The said commissioners or their assistants are hereby empowered to enter upon and take possession of all premises or parts thereof where cattle so affected as aforesaid are found, and to cause the said cattle to be confined in suitable inclosures or buildings for any time requisite in the judgment of the said commissioners or their assistants, and prior to the slaughter and burial of the said animals and the full and complete disinfecting and cleansing of such premises; and all persons, whether owners of or interested in such cattle or otherwise, who shall resist, impede, or hinder the said commissioners or their assistants in the execution of their duties under this act shall be deemed guilty, and on conviction of the same, of a misdemeanor, and shall be punishable with fine not exceeding one thousand dollars, or imprisonment not exceeding the term of six months, or of both, in the discretion of the court before which they shall be adjudged guilty as aforesaid.

9. The commissioners shall have power to establish all such quarantine or other regulations as they may deem necessary to prevent the spread of the disease, or its transit in railroad cars, by vessels, or by driving along the public highways; and it shall be proper for the governor of the State, by public proclamation as aforesaid, to enjoin all persons concerned or engaged in the traffic or transit of cattle or sheep, not to enter upon any such places, or take therefrom any such animal, or to pass through any such locality, and within such distances from the same as in the said proclamation may be prescribed.

10. The sum of one thousand dollars, or so much thereof as may be necessary, is hereby appropriated to pay to the said commissioners for their services, while actually engaged in the duties enjoined upon them in this act, at the rate of five dollars per day to each, and such further sums as may cause them actual expenditures in traveling to and from the places they may be called upon to inspect or visit, and in the printing or publishing of all regulations or notices mentioned in this act. And the further sum of fifteen thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any money in the treasury not otherwise appropriated, to pay for animals slaughtered by the provisions of this act, and the comptroller is hereby directed to pay for the same on the warrant of the said commissioners.

11. The assistant commissioners are to receive for each and every day while actually engaged in duties provided by this act the sum of three dollars per day, and all actual expenses and disbursements paid or incurred in the discharge of their duties as aforesaid, which said sums shall be a charge upon the county for which he is appointed,

and shall, when duly audited by the board of supervisors of the said county, be paid by the county treasurer.

12. The slaughtering of animals for beef after having been exposed to the contagion, or supposed to have been so exposed, may be permitted by the commissioners, or prohibited by them, as they may judge proper.

13. This act shall take effect immediately, and shall continue in force for one year.

THE IMPORTATION OF CATTLE PROHIBITED.

The following is an official copy of the act passed by Congress to prohibit the importation of cattle in 1865:

AN ACT to prevent the spread of foreign diseases among the cattle of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the importation of cattle be, and hereby is, prohibited. And it shall be the duty of the Secretary of the Treasury to make such regulations as will give this law full and immediate effect, and to send copies of them to the proper officers in this country and to all officers or agents of the United States in foreign countries.

SECTION 2. *And be it further enacted,* That when the President shall give thirty days' notice by proclamation that no further danger is to be apprehended from the spread of foreign infections or contagious diseases among cattle, this law shall be of no force, and cattle may be imported in the same way as before its passage.

Passed the House of Representatives December 11, 1865.

Attest:

EDWARD McPHERSON, *Clerk.*

THE BRITISH GOVERNMENT.

The following is an abstract of the rules and regulations adopted by the British Government to prevent the spread of the rinderpest and pleuro-pneumonia among cattle, and foot and mouth disease among sheep in its Indian possessions:

1. When cattle or sheep are purchased at a fair, they should always be treated as having been probably exposed to contagion.

2. When cattle or sheep are being removed from one locality to another, they should not be allowed to mix with other cattle or sheep *en route*, and should never be kept overnight in or near quarters previously occupied, as such quarters are often contaminated by having recently been occupied by diseased animals.

3. When cattle or sheep are purchased in a fair or elsewhere, they should, on being brought to the purchaser's premises, be kept by themselves, and not allowed to mix with the old cattle of the farm, at pasture or watering time, or at any time. They should be kept by themselves in complete isolation for one month or six weeks, in order to have proof afforded whether they are affected with a contagious disease or not.

4. When cattle are traveling, or are moved from one district to another, they are liable to be exposed to contagion and contract disease; therefore, on their arrival at home, they should be carefully inspected, and if they have passed through an infected district they should be kept by themselves for some time. (See Rules 20 and 21.)

5. When diseases of a contagious nature, or supposed to be of a contagious nature, appear among cattle, the first important duty is to separate the sick from the healthy animals.

6. Carefully inspect all the animals, and remove to the hospital any showing the slightest symptoms of disease.

7. Divide the healthy cattle into several lots, making each lot as small in number as space will permit. Picket the cattle in such lots a good distance apart, and to windward of the sick cattle. Frequently inspect each lot, and remove at once any animal in the least unwell. By steadily adopting this plan, the disease will be found in a few days to exist only among one or two lots, and by at once removing to the hospital any becoming sick the disease will speedily be arrested in spreading through the herd. Each lot should be kept isolated from other cattle for a period from four to six weeks.

8. The hospital to contain the diseased cattle should be inclosed by a strong fence and isolated. The attendants and the sick cattle must not be permitted to leave the isolated area. Food and water may be taken to the attendants and cattle, but no forage, water, litter, clothing, or anything else should be taken from the hospital. Dogs should not be allowed to go to and from the hospital, as they may carry contagium to places where healthy stock may be.

9. The dry litter, &c., of the hospital should be burnt inside the hospital area, and the moist dung and discharges, &c., should be frequently removed from the stalls and buried in pits dug in the hospital premises. These pits should be six feet or more deep, and should be filled with the wet litter, dung, &c., of the hospital up to within two feet of the surrounding ground surface, and then quicklime and good fresh earth should be used to fill up the remaining two feet.

10. The stalls, walls, &c., and ground of the hospital should be scrupulously cleaned by frequent sweepings and washings, and after every cleansing disinfectants, lime, ashes, or even dry earth, should be plentifully scattered over the floors and ground, and the wood-work and walls should be first washed and then whitewashed.

11. The hospital should be well ventilated; sulphur fumigation should be daily carried out for an hour or so in the hospital building, and at this time the doors and windows may be closed and the ventilators only kept partly open.

12. The constant burning of sufficient litter, opposite the doors or the windward side of the building, at seasons when flies are numerous and troublesome to cattle.

13. The sick cattle should be kept scrupulously clean, and have thin gruel and fresh green grass in its season for diet. The healthy cattle should also be kept on laxative food, as cattle fed on hard dry food have the disease in a more severe form than those fed on laxative fodder.

14. When these contagious diseases have prevailed among cattle or sheep, they should not be allowed to pasture, or to be kept with unaffected herds, until a month or six weeks have expired after the last case of disease occurring among the affected lot.

15. Animals that recover should be well washed with warm water and soap prior to being removed from the hospital, and, if obtainable, carbolic acid should be added to the warm water in the proportion of one wineglassful of the acid to a gallon of warm water.

16. Carcasses of stock that die of rinderpest, black-quarter, and other forms of anthrax fever, and pleuro-pneumonia, should be buried and covered with at least four feet of earth.

17. The hides of cattle that die of these contagious diseases should be either well scored and slashed with a knife, thus destroying their value, and should be then buried with the carcasses.

18. The surface of earth floors of stalls, and ground on which cattle affected with contagious diseases have been kept, should be removed and buried, and the earth below should be well dug up and turned over,

and the floor remade with fresh earth. Brick and stone floors may be scraped, washed, and disinfected with quicklime or carbolic acid.

19. Poles of carts and harness, or saddlery, &c., used by animals affected with contagious diseases, should be washed and disinfected.

20. The periods of incubation of rinderpest, black-quarter, and other forms of anthrax fever, all believed to be within twenty-eight days; so a month has been named as the time for an animal supposed to have been exposed to the contagium of these diseases to be kept isolated.

21. The period of incubation of pleuro-pneumonia varies from two to six weeks, but has been found, as a rule, to be about forty days; so when cattle have been exposed to the contagium of this disease, they should be kept isolated for forty-five days.

